

## **Section 02210**

### **Presumed Asbestos-Containing Materials (PACM)**

#### **PART 1      GENERAL**

##### **1.1      SCOPE**

This section includes the requirements for handling, packaging, loading, hauling and unloading of Presumed Asbestos Containing Materials (PACM). The excavation, handling, packaging, loading and hauling activities at and from the Southern Waste Units (SWU) area are considered “disturbance of an inactive asbestos waste disposal site” and “asbestos waste handling,” while the unloading activities at the On-Site Disposal Facility (OSDF) are considered “active asbestos waste disposal” — rather than “asbestos hazard abatement” — as those terms are used in the referenced administrative code and federal regulations.

##### **1.2      RELATED SECTIONS AND PLANS**

- A.            Section 02205 - Impacted Material Excavation.
- B. Part 6 - Statement of Work.
- C. Part 8 - Environmental Health and Safety, and Training Requirements.
- D.            Impacted Material Placement Plan, On-Site Disposal Facility, August 1997, Revision H.
- E. Waste Acceptance Criteria Attainment Plan for the On-Site Disposal Facility, August 1997, Revision B.

##### **1.3      REFERENCES**

- A.            Ohio Administrative Code (OAC), Chapter 3745-20, Asbestos Emission Control.
- B. Title 29, Code of Federal Regulations (CFR), Part 1926.1101, Asbestos.

## **1.4 HEALTH AND SAFETY REQUIREMENTS**

Environmental Health and Safety, and Training requirements shall be as specified in Part 8.

## **1.5 SUBMITTALS**

- A. Submit a PACM Handling Plan, in compliance with all applicable federal (CFR) and state (OAC) requirements, within ten (10) calendar days from the Notice to Proceed for approval by the Construction Manager. The plan shall describe or present the following as a minimum (additional requirements are presented in Part 8):
1. Method to be used to ensure Contractor's (inclusive of Subcontractors) employees are informed of the presence of PACM in the project work area.
  2. Method(s) to be used to establish a restricted area adequate to deter the entry of unauthorized personnel within 100 feet of the PACM work areas.
  3. Personal protective equipment to be worn by employees.
  4. Work practices to be observed by employees.
  5. Methods to be used to handle and package friable PACM and to ensure no visible asbestos emissions during handling, loading, hauling and unloading.
  6. Methods to handle non-friable PACM to minimize the potential for non-friable PACM to become friable and to ensure no visible asbestos emissions during handling, loading, hauling and unloading.
  7. Methods to be used if PACM must be size-reduced to meet size criteria described in the Impacted Material Placement Plan for OSDF.
  8. The encapsulant and surfactant agents to be used.
  9. Product data and technical information including application instructions and Material Safety Data Sheet (MSDS) for each material proposed for use.
  10. Labeling methods.
  11. Identification of the Contractor's "asbestos competent person" personnel.

## **PART 2      PRODUCTS**

### **2.1      MATERIALS**

- A.        Clear polyethylene sheeting and clear polyethylene disposal bags shall be a minimum of 6 mils thick.
  
- B. Materials to be used as encapsulants and surfactants shall be in original, new, and unopened packages and containers bearing manufacturer's name, label, and the following information:
  - 1.        Name of material.
  - 2.        Manufacturer's stock number and date of manufacture.
  - 3.        Manufacturer's name.
  - 4.        Thinning instructions.
  - 5.        Application instructions.
  
- C. Surfactant (wetting agent) shall as specified by the following approved manufacturers:
  - 1.        Childers CP-225 CHIL-SORB.
  - 2.        Certech.
  - 3.        Expert Environmental Products.
  - 4.        International Protective Coatings Corp.
  - 5.        Or approved equivalent.
  
- D.        Encapsulants shall be as specified by the following approved manufacturers:
  - 1.        Childers - CP-240 CHIL-LOCK.
  - 2.        Certified Technologies - Certane 2050.
  - 3.        Expert Environmental Products - EPPCO #1.
  - 4.        International Protective Coatings - Serpiloc.
  - 5.        Or approved equivalent.
  
- E. Other materials required by the Contractor for handling and packaging of friable PACM.

## **PART 3      EXECUTION**

### **3.1      APPLICATION**

- A.        FDF has provided the necessary notification of disturbance of an inactive asbestos disposal site required by OAC 3745-20-07(D). The OSDF is an active asbestos waste disposal site in accordance with OAC 3745-20-06.
- B. The Contractor shall be responsible for:
1.        Adherence and compliance to work practices and procedures set forth in applicable federal regulations (CFR) and state codes (OAC).
  2.        Ensuring Contractor's (inclusive of Subcontractor) employees are informed of the presence of PACM in the project work area(s) in accordance with 29 CFR 1926.1101(d) and OAC 3745-20-06(B)(4).
  3.        Establishing a restricted area adequate to deter the entry of unauthorized personnel within 100 feet of the PACM work areas in accordance with OAC 3745-20-06(B)(4).
  4.        Obtaining required training.
  5.        Conforming with Part 8 for training requirements.
  6.        Dust control in accordance with Part 6 and the Dust Control Plan.
  7.        Using wet methods and other work practices and engineering controls to prevent creation of visible asbestos emissions during handling of PACM.
  8.        Personal air monitoring in accordance with 29 CFR 1926.1101(f) including sampling necessary to complete initial exposure assessment.
- C. The Contractor shall ensure an asbestos competent person is on-site anytime PACM is being disturbed, excavated, handled, loaded, hauled, or unloaded.
- D.        Contractor shall use the following project specific handling methods in accordance with the approved PACM Handling Plan:

1. Prior to excavation and at least once a day during excavation, the Contractor's asbestos competent person shall walk the work area and identify PACM visible at the surface.
2. Non-friable PACM, which is determined not to have the potential to become friable, shall be considered as unclassified impacted material and shall be excavated, loaded, hauled and unloaded as specified in Section 02205.
3. Friable PACM identified shall be either wetted with amended water (water mixed with surfactant) or encapsulated, and separated from the impacted material.
4. Care shall be taken so that the friable PACM does not break or crumble during handling. In the event that it breaks or crumbles during handling, encapsulate the exposed surfaces.
5. Friable PACM components meeting the OSDF Waste Acceptance Criteria (WAC) physical size criteria and removed intact in large pieces shall be wrapped in two layers of polyethylene sheeting, secured with duct tape, and labeled in accordance with OAC 3745-20-05(C)(1). Multiple pieces may be grouped prior to wrapping.
6. Surfactants or encapsulants shall be applied during sizing of any large pieces of friable PACM to meet the OSDF WAC physical size criteria.
7. Pieces of friable PACM not conducive to wrapping shall be bagged in a polyethylene bag, sealed, bagged in a second polyethylene bag, sealed, and labeled in accordance with OAC 3745-20-05(C)(1).
8. Friable PACM with sharp-edged components (e.g., nails, screws, metal lath, tin sheeting) capable of tearing the polyethylene bags or sheeting shall be handled in either of the following ways:
  - (a) Pad or wrap and secure the sharp-edged components in a manner to prevent tearing of the polyethylene, then wrap or bag in accordance with the respective preceding entries.

- (b) Place into Contractor-supplied, polyethylene-lined containers (i.e., fiberboard boxes or drums). Metal containers are not allowed.
    - © Container size is subject to the Impacted Material Placement Plan for OSDF for Category 5. The polyethylene liner shall be sealed prior to sealing the container. The container shall be labeled in accordance with OAC 3745-20-05(C)(1).
  - 9. Wrapped, bagged, or containerized friable PACM shall be segregated from other excavated material and accumulated at the Special Materials Transfer Area. When a sufficient quantity for a segregated load is accumulated, it shall be loaded and hauled to the OSDF. Loads shall be prepared and secured to prevent any visible emissions, load loss, and spillage or leakage of liquids.
  - 10. No PACM shall be left exposed at the surface of the excavation at the end of the work day.
- E. Wrapped, bagged, or containerized friable PACM shall be unloaded in the OSDF as Category 5 material in accordance with the Impacted Material Placement Plan for OSDF, which presents additional requirements.
- F. Each work day during disturbance, excavation, handling, hauling, loading, unloading or placement of PACM waste, the Contractor's asbestos competent person shall conduct a daily inspection of the PACM waste handling work area(s) and adjacent areas. If there is visual evidence of asbestos contamination (e.g., spills of PACM waste) outside the demarcated PACM waste handling work area(s), the Contractor shall take immediate action to abate the hazard. The incident shall be reported immediately to the Construction Manager.

#### **END OF SECTION**

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Date: 11/14/97

Rev.: 0 RE: BP

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11/17/97

WBS No: 1.1.1.1.2.3.6

SCEP/165/SWU/EXCAV